

REMARKS

Claims 1, 6 and 7 are amended hereby. No claims are canceled. Claims 9 and 10 are newly added. Accordingly, after entry of this Amendment, claims 1-10 will remain pending.

In the Office Action dated November 3, 2008, the Examiner stated that the Information Disclosure Statement ("IDS") filed on December 16, 2005 failed to comply with the requirements of 37 C.F.R. § 1.98(a)(1). To address the deficiencies noted by the Examiner, the Applicant respectfully submits a new IDS that is believed to be compliant with Rule 98. Accordingly, the Applicant respectfully requests that the Examiner consider the cited references.

In the Office Action, the Examiner rejected claims 6, 7 under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. Specifically, the Examiner stated that the term "forcibly" is unclear. While the Applicant respectfully disagrees with the rejection, the Applicant has deleted the term "forcibly" from the claims. Accordingly, the Applicant respectfully requests that the Examiner withdraw this rejection of the claims.

Next, the Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over Aurich et al. (U.S. Patent No. 6,991,301) in view of Mayer et al. (U.S. Patent No. 6,945,611). Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Aurich et al. in view of Mayer et al. and further in view of Hollandsworth et al. (U.S. Patent Application Publication No. 2005/0099061). The Applicant respectfully disagrees with these rejections and, therefore, respectfully traverses the same.

Claims 1-10 of the present invention are patentable over the cited references because they recite a brake system that combines a number of elements including, among them, speed sensors provided on some of the axles of a vehicle bogie, where the sensors measure the speed of rotation of the respective axle, provide data to a processor that communicates with a brake control unit via a databus, wherein the speed sensors sample the axle speed in intervals of greater than 10 ms. None of the references describe or suggest such a combination of features. As a result, the references cannot be relied upon to render obvious any of claims 1-10.

Aurich et al. describes a brake system for a railway vehicle 1 that includes a vehicle body 2 with three bogies 3. (Aurich et al. at col. 9, lines 21-26.) The brake system includes a central control unit 21 and a compressed air generating device 22. (Aurich et al. at col. 9, lines 28-29.) By means of a vehicle data bus 23, the central control unit 21 receives

operating data concerning the entire railway vehicle or the entire train formation. (Aurich et al. at col. 9, lines 30-32.) Control data for the brake system is transmitted via a braking data bus 24 to the air generating device and the local control units. (Aurich et al. at col. 9, lines 33-37.) The data can be transmitted to additional vehicles of the train formation via connection units 25. (Aurich et al. at col. 9, lines 37-39.)

A review of Aurich et al. makes it apparent, however, that the reference does not describe a brake system where the speed sensors sample the axle speed in intervals of greater than 10 ms. Furthermore, those skilled in the art would understand that the sampling rate for a sensor would be 10 ms, because a 10 ms interval is common in the industry. As a result, using a lower sampling rate, *i.e.* a sampling rate with a greater interval, would not be within the level of ordinary skill in the art, especially when combined with other features recited by the claims.

As noted in the specification at page 1, the known (*i.e.* the prior art) utilizes a sampling cycle of 10 ms, “which requires a significant amount of resources, back to the brake control unit, which is usually located on the vehicle drive unit.” (The Specification at page 1, lines 15-17.) “Due to the speed at which such signals can be transmitted, in known systems the axle speed is typically sampled at 10 ms intervals for the wheel slide protection to be effective.” (The Specification at page 3, lines 17-19.) “The introduction of local or distributed control of the brake pressure permits a much slower cycle time to be used and it is possible to match the performance of wheel slide protection using cycles an order of magnitude longer.” (The Specification at page 3, lines 19-21 (emphasis added).)

Mayer et al. does not cure the deficiencies noted with respect to Aurich et al. Mayer et al. describes a braking system for a vehicle provided with an ABS or anti-ski protection system. The braking system is employed on a vehicle 1 with first and second wheel groups 2, 3, which may be bogies on a rail vehicle. (Mayer et al. at col. 3, lines 42-45.) A rotational wheel speed sensor 8-11 is assigned to an axle 4-7. (Mayer et al. at col. 3, lines 45-46.) The wheel speed sensors 8-11 are connected to a brake control unit 12. (Mayer et al. at col. 3, lines 47-49.)

Among other features, Mayer et al. also fails to describe a brake system where the speed sensors sample the axle speed in intervals of greater than 10 ms. Moreover, adding speed sensors to the system described by Aurich et al. would not allow those skilled in the art to create a system with speed sampling cycles of greater than 10 ms or about 100 ms (as now

recited by claim 9. At least for this reason, Mayer et al. cannot be relied upon to reject any of claims 1-10 in the present application.

Hollandsworth et al. is similarly deficient. As a result, Hollandsworth et al. also may not be relied upon, either alone or in combination with the other references, to render obvious any of claims 1-10. Hollandsworth et al. describes an electronic control for a railway airbrake. Among other features, however, the reference is silent as to the sample rate. Accordingly, the reference does not assist the Examiner with a rejection of the claims.

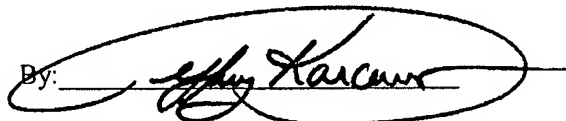
Before closing, the Applicant respectfully notes that claim 9 finds support at page 3, lines 19-21, of the Specification. In addition, it is noted that support for claim 10 may be found, generally, at pages 3 and 4 of the Specification.

Each of the rejections having been addressed, the Applicant respectfully requests that the Examiner withdraw the rejections of the claims and pass this application quickly to issuance.

If there are any fees required for this submission that are not otherwise accounted for, please charge Deposit Account No. 02-1010. In addition, please credit any overpayments to the same Deposit Account.

Respectfully submitted,

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